

## **Department of Health and Mental Hygiene (DHMH)**

**Fiscal Year 2005**

**Information Technology Master Plan**

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## **SECTION ONE – GENERAL AGENCY INFORMATION**

### **A. DHMH VISION STATEMENT**

Leading the Way to a Healthy Maryland in the New Millennium

### **B. DHMH MISSION STATEMENT**

DHMH promotes the health of all Maryland citizens by providing health and support services; by improving the quality of health care for all; by providing leadership in the development and enactment of responsible and progressive health care policy; and by serving as the advocate for public health initiatives and programs to improve the quality of life for all Marylanders. Maryland's public health is our business.

### **C. BUSINESS FUNCTIONS**

The Department of Health and Mental Hygiene has identified four key functions that it needs to carry out in order to fulfill its mission. These are monitoring and ensuring delivery of quality health care; assuring access to health care for Maryland citizens; promoting improvements in public health; and, coordinating health care planning and policy in the state. In addition, infrastructure in the form of a variety of support services, including information technology, provides a solid foundation that allows the Department to perform its core functions.

### **HEALTH CARE QUALITY**

A Maryland health care delivery system that values the standards of quality of service, continuous improvement and accountability and ensures that the most appropriate services are delivered to all who need them.

Outcome Goals:

- Improve quality of care in the regulated industry
- Improve quality of care in State financed programs
- Improve quality of care in State-operated programs and local health departments
- Ensure quality of care through licensed health care professionals

### **HEALTH CARE ACCESS**

Availability of a comprehensive range of appropriate (community-based vs. institutionalized) health and mental health services for all Maryland citizens regardless of income, location or personal circumstance.

Outcome Goals:

- Assure health care coverage
- Improve access to support services for individuals with disabilities
- Assure sufficient supply of providers and services
- Reduce barriers to appropriate utilization of services

## **PUBLIC HEALTH IMPROVEMENTS**

The provision and promotion of activities that safeguard and improve the health and well-being of Marylanders and communities from illness and injury.

### **Outcome Goals:**

- Improve children's well being
- Improve maternal well-being
- Reduce chronic disease
- Reduce infectious disease
- Reduce injury, illness and death through prevention efforts

## **HEALTH CARE POLICY**

Consistent advocacy, guidance and direction provided by DHMH to ensure enhanced coordination, collaboration and cooperation among agencies responsible for health care planning and program development.

### **Outcome Goals:**

- Improve the coordination of health policy development

## **INFRASTRUCTURE**

The administrative functions necessary to support the operation of all DHMH program units. This includes budget, personnel, training, information technology and other support areas, as well as environment/space.

### **Outcome Goals:**

- Ensure well-qualified workforce
- Ensure a physical work environment that promotes work effort
- Provide reliable access to accurate, secure and timely electronic information
- Provide internal support services and goods in an efficient, timely and customer friendly manner

In addition to the priorities and goals, the Department has established a crosscutting goal to improve internal and external customer service.

## **D. ORGANIZATION CHART**

[DHMH Organization Chart](#)

## SECTION TWO

### EXECUTIVE SUMMARY – AGENCY GOALS AND KEY STRATEGIES

As the State's public health agency, the Department of Health and Mental Hygiene's core goals are to assure that Maryland citizens have access to health care services, to improve public health across the demographic spectrum, and to ensure that the health care provided is of a consistently high quality throughout the state. The responsibility for these efforts lie primarily with the Medical Assistance Program (health care access), Public Health Services (public health), and the Office of Health Care Quality and other regulatory and licensing programs (quality). However, there is significant crossover impact among the different areas. For example, access to health care services affects health outcomes.

Information technology plays an important role in the Department's efforts to achieve its goals. Among the IT functions are facilitating communication within the Department and with its many external partners; giving citizens convenient access to health information and services; and providing powerful tools for data collection and analysis.

The Department uses the Managing for Results (MFR) process to establish overall goals and objectives. Following is a sample from the FY 2004 MFR that illustrates several key DHMH goals and objectives with regard to public health, health care access and health care quality.

Key Goals	Objectives
<b>Goal 1.</b> To improve children's well-being.	<b>Objective 1.1</b> By CY 2010, the infant mortality rate will be no more than 7 per 1,000 live births for all races and 13 per 1,000 live births for African-Americans.
<b>Goal 3.</b> To reduce chronic disease.	<b>Objective 3.1</b> By CY 2004, reduce overall cancer mortality to a rate of no more than 202.8 per 100,000 persons. (Age-adjusted to the 2000 U.S. standard population.)
<b>Goal 4.</b> To reduce infectious disease.	<b>Objective 4.1</b> By CY 2004, the annual increase in HIV incidence (measured as a five year average) will be no greater than 2.7%.
<b>Goal 6.</b> To improve quality of care in regulated industries.	<b>Objective 6.2</b> By June 30, 2004, the percent of nursing homes with an ongoing restorative nursing program will be 100%.
<b>Goal 8.</b> To improve quality of care in State-operated programs.	<b>Objective 8.1</b> By FY 2004, reduce the readmission rate within 30 days of discharge from MHA regional hospitals not to exceed 5%.
<b>Goal 11.</b> To improve access to support services for individuals with disabilities.	<b>Objective 11.1</b> By the end of FY 2004, 100% of the individuals on the waiting list as of 1/1/98 will receive at least one DDA funded service.
<b>Goal 12.</b> To maintain affordable hospital care for all Maryland citizens	<b>Objective 12.1</b> In Fiscal Year 2004, to maintain a rate of increase for hospital cost per admission less than the national average.
<b>Goal 13.</b> To reduce barriers to appropriate utilization of services.	<b>Objective 13.1</b> For Calendar Year 2004, increase to 70% the proportion of HealthChoice children aged 4-20 years who receive dental services. (In Calendar Year 2000, 28.7% of HealthChoice children aged 4-20 years received dental services.)

The FY 2005 MFR was not available at the time this report was prepared. The Department's entire MFR submission can be viewed on the DHMH website at:

<http://www.dhmh.state.md.us/mfr/index.htm>

## SECTION THREE – AGENCY IT STRATEGIC DIRECTION

### A. SUMMARY OF AGENCY IT ENVIRONMENT

#### Name of Agency Information Technology Organization

Information Resources Management Administration (IRMA)

#### Vision/Values Statement

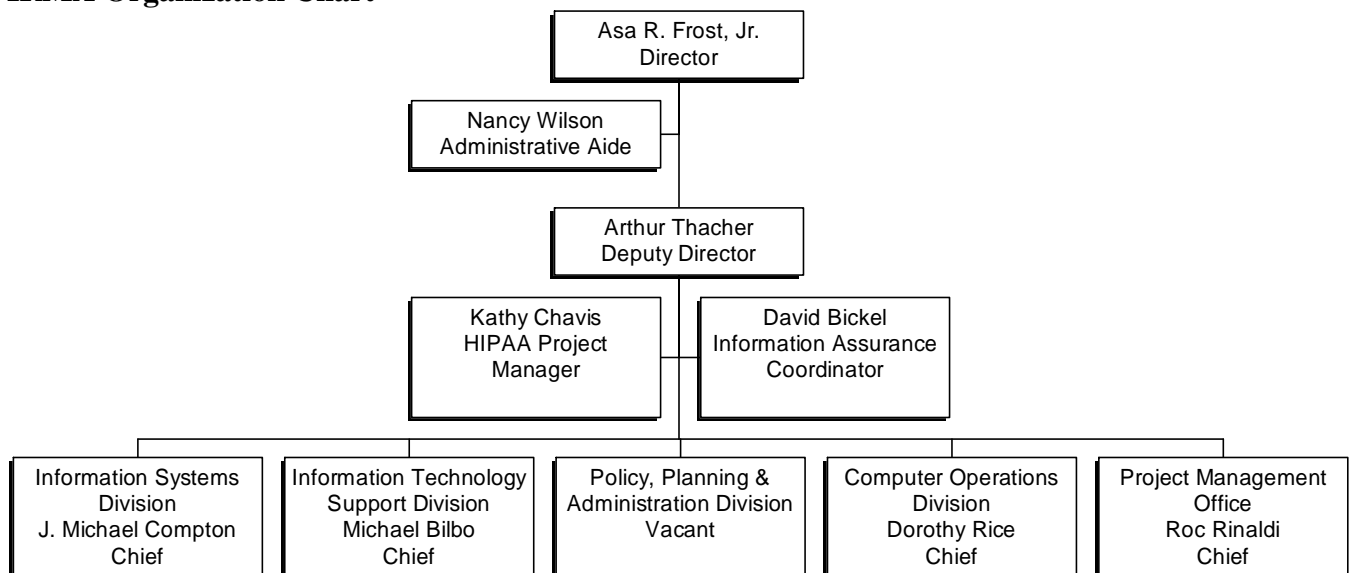
**Vision:** Innovative technology for quality health information and services

**Values:** IRMA's guiding principles are communication, teamwork, career growth and performance.

#### Mission Statement

**Mission:** IRMA's mission is to coordinate, plan, develop and maintain Department-wide information resources; to provide technological support, information services and electronic communications in a prompt, secure and reliable fashion; to recommend uniform information technology policies, standards and procedures; and to assure access to accurate, timely and complete information in accordance with the DHMH Information Technology Master Plan.

#### IRMA Organization Chart



## **1. Background**

The Information Resources Management Administration (IRMA) is responsible for implementing the guidelines set forth in the State of Maryland Information Technology Master Plan for the Department of Health and Mental Hygiene (DHMH) and operates in conjunction with the Health Information Coordinating Council (HICC). IRMA is comprised of the Director's Office and four divisions:

### **Director's Office**

The IRMA Director's Office provides direction for DHMH information resources management. This is accomplished through (1) formulating overall DHMH information resources strategy and related policies, procedures and fiscal controls; (2) managing and coordinating the development, implementation and operations of information systems using a variety of computer platforms; (3) planning and managing the DHMH Internet and Intranet development; (4) providing support of information processing goals and objectives; direction and oversight for eGovernment initiatives; (5) providing a full range of hardware and software customer services; and (6) development and implementation of the DHMH local area network (LAN) and wide area network (WAN); and (7) information security and privacy. The Director functions as the DHMH Chief Information Officer.

### **Project Management Office**

The Project Management Office (PMO) exists to provide oversight and management assistance for major projects within DHMH. Its goal is to insure that effective leadership, collaboration and communication occurs for all assigned projects. The office produces value through its knowledge and ability to lead and facilitate management to insure optimum results for specific projects. Research, analysis, creativity and follow up activities are a portion of the skill sets. The PMO brings together appropriate diverse elements within and outside of DHMH and applies these resources to the tasks at hand.

The projects for which the Project Management Office is responsible tend to be multi-year and department-wide in nature. The focus is on utilization of current and emerging computer technologies and project management concepts and principles. It insures that projects are properly planned, adhere to all State and DHMH policies and guidelines, and maximize the value of the funds invested. The goal is to complete projects on time and within budget, while obtaining the intended results.

### **Information Systems Division**

The Information System Division provides applications development support to a growing number of DHMH administrations. The Systems Development Branch provides services such as: designing, developing, integrating, testing and implementing reliable and secure customized systems for the Internet, Intranet and Client-Server environments.

GIS is the newest unit of the Division. It is principally responsible for developing the department's GIS capacity. The unit maintains database servers, application servers and a web server as the primary geographic information source. The unit also develops and maintains the department's spatial data level database and GIS applications as well as providing technical GIS support and training to the department and staff.

In addition, this Division provides system analysis; design and programming support for automated applications installed on the mainframe and midrange computer systems. Some 70 administrative and programmatic systems and more than 4,300 batch and on-line application computer programs covering accounting, human resources, vital records/health statistics and other health related program areas are maintained on the mainframe alone. Electronic transfer of data files to and from DHMH facilities and the Annapolis Data Center are also supported by the division through the use of the attended and unattended communication polling processes.

This Division also includes the Hospital Management Information System (HMIS), which is an integrated network of ten IBM midrange systems supporting 20 State operated Inpatient Facilities. HMIS provides a centralized billing module and distributed admission/discharge/transfer (Census) module at each facility, as well as on-line, real time Pharmacy order entry/dispensing module. On a daily basis, census transactions from each facility are formatted and subsequently transmitted to the central office for processing with the statewide database used for centralized monthly billing cycles and statewide patient tracking. Strategies for development of an integrated electronic medical record are underway based upon requirements for future fee for service billing and Health Insurance Portability and Accountability Act (HIPAA) compliance.

### **Information Technology Support Division**

The Information Technology Support Division provides comprehensive Information Technology (IT) customer services to all DHMH units. Responsibilities include IT Project Planning, network systems analysis, local and wide area network implementation and support, data communications support, Internet and Intranet access, software, hardware, and equipment purchasing and allocation, technical support of installed hardware/software, PC/printer repairs, virus repairs and equipment transfer/moves. Other responsibilities include departmental microcomputer policies, standards and procedures. Technical support to remote headquarters, facilities and to local health departments is limited to Internet, Intranet and wide area routed frame relay communications and consultation.

The Department of Health and Mental Hygiene Information Coordinating Council (HICC) has developed a plan for infrastructure enhancements for all programs within DHMH and to provide the programs with access to the DHMH network; and to maintain the network.

The ITSD provides information technology support to the HIPAA and eGovernment initiatives.

### **Policy, Planning and Administration Division**

The Policy, Planning and Administration Division is responsible for fulfillment of a variety of administrative functions including: IRMA information technology procurements, Internet and Intranet services; distance learning activities; information technology training, and information technology strategic planning and policy development. The Division is responsible for the DHMH Information Technology Master Plan and for Information Technology Project Requests.

The IT Training, Distance Learning and Special Projects branch is tasked with the responsibility of providing information technology training to the employees of the Department, as well as distance learning technology and data eradication services to DHMH units throughout the State.

The Division also is responsible for IRMA's fiscal management, personnel transactions, records management, physical inventory, Managing for Results requirements, telecommunications requests and special projects.



## **Computer Operations Division**

The Computer Operations Division provides a variety of mainframe-based Data Processing customer services to all DHMH units. These services include: data entry, electronic billing, production control and laser/impact printing. This Division also provides operational support to the Hospital Management Information System (HMIS) and both operational and data entry support to the Maryland Women, Infants and Children (WIC) program.

Data Entry, HMIS, Electronic Billing, Production Control/Laser Printing and WIC Operations provide internal/external support services such as reports, billing transmission, key-entry system operation support in an efficient, timely and customer friendly matter. The Computer Operations Division is currently operating a Xerox 4635 and a Xerox Docuprint 96 in the Laser Printing Center, which provides DHMH with appropriate printer backup ability to meet all mainframe printing needs.

## **Health Information Coordinating Council**

The purpose of the Health Information Coordinating Council (HICC) is to serve as a permanent, senior-level, decision-making and implementation body for carrying out the Department's information resources management responsibilities. As a department-wide partnership of all stakeholders, the HICC provides recommendations on essential components of information resources management programs and policies to the Director of the Department's Information Resources Management Administration.

The executive leadership of the DHMH, through the Maryland Health Information Coordinating Council will ensure that the Department's investments in information resources are managed efficiently in support of the DHMH mission. In this, the HICC acts under the Secretary's charter of responsibility to make recommendations for information technology planning, budgeting, contracting, information resources management policies and standards, and access to and appropriate use of public health data.

The HICC represents all DHMH organizations and local health department partners through senior memberships. The HICC accomplishes its mission through workgroups which include non-members, on an ad-hoc or standing basis. The workgroups focus on broad or technical areas and produce plans, reports, recommendations, guidelines, and policies. HICC workgroups include the following areas:

- Security and Confidentiality
- Strategic Planning
- Communication and Learning
- Hospital Management Information Systems
- Geographic Information Systems
- Health Insurance Portability and Accountability Act (HIPAA)
- Electronic Forms

The Executive Board of the HICC is comprised of the Secretary, Deputy Secretaries, select senior executive staff, and the co-chairs of the HICC. Recommendations and unresolved issues are presented to the Executive Board for review, comment and guidance.

The HICC provides the Department with an appropriate forum to conduct discussions, review and endorse policies, increase awareness and support for information resources management issues, and receive recommendations from senior managers regarding critical technology issues facing the Department, the State, local partners and the public at large.

Effective information resources management (IRM) is essential to achieving the DHMH mission to fulfill public health goals and serve the citizens of Maryland. Emphasis is placed on critical Department-wide issues that support projects and services delivered at the program level. Strategic IRM directions focus activities that will successfully achieve IRM goals and position the Department for the future.

DHMH's success in its mission requires ready access to data, both by the Department's staff and by others. Having sound information policies and practices, and efficient, responsive information systems is a key priority of DHMH's senior management team. The Department is committed to gathering and analyzing the data needed to evaluate health risks and trends, measure health program results, and educate individuals throughout the State, make policy decisions, and implement interventions to effect change. DHMH is also committed to promoting and supporting innovative technical solutions to health information problems. A sound IRM program is critical to the Department's ability to provide objective, reliable, and understandable information for these purposes.

DHMH, in order to optimize the limited resources available, promotes the sharing of best practices among its units, as well as, information about emerging innovative technologies. The Department structures horizontal committees and teams that utilize resources from all units. This will result in joint ventures which benefit all participants and the State of Maryland.

The implementation of new or updated technologies include training and end-use support, an evaluation of the project, transition costs or benefits. These elements are collected and compared to the original benefits of the business process investigation to present to the administration for future planning and management.

## **2. Drivers and Issues**

The two most significant drivers of information technology in the Department of Health and Mental Hygiene are the Health Insurance Portability and Accountability Act (HIPAA), and emergency preparedness primarily driven by bio-terrorism.

### **HIPAA**

The HIPAA rules are categorized into three areas, each with a separate implementation date:

- Privacy of personal health information, effective April 2003
- Electronic transactions and code sets, effective October 2004
- Security of personal health information, effective April 2005

Although the privacy rules will have a direct bearing on the security aspects of HIPAA, they do not have a significant emphasis on information technology. However, the electronic transactions and codes sets have a major impact on all medical information systems with a particular effect on claims processing. Within DHMH, the Medicaid process has had the greatest impact due to the enormity of the system and the numbers of health providers involved in the claims process. Other systems such as the Hospital Management Information System, Breast and Cervical Cancer, Kidney Program, Children's Health Program, and AIDS Program are working to replace and/or augment existing claims processing systems in order to meet the October 2003 deadline.

The third area of concern is in personal health information security. This is the area where information technology is impacted. All electronic transmissions and stored data must be protected using methodologies such as data encryption and third party authentication.

### **Emergency Preparedness**

Response to public health emergencies is a growing concern. The emphasis on bio-terrorism by the Department of Health and Human Services (HHS) and other Federal agencies has resulted in new policies regarding the responsibilities of public health agencies, more cooperative efforts between federal, state, and local health agencies, and the need for standardized and integrated health information systems.

The Centers for Disease Control and Prevention (CDC) is working with all of the states to establish a national Public Health Directory using the Lightweight Data Access Protocol (LDAP). This directory will contain the identity of all health and medical personnel in the country along with their respective roles in health and medical emergencies, and methods for contacting each person. The directory will provide a standardized method for state and local public health agencies to maintain their specific directories while allowing for sharing the directory information with the CDC.

The CDC has developed a National Electronic Disease Surveillance System that will be used by all states for the reporting of infectious diseases. The system will be deployed in phases beginning with a core reporting capability and adding new modules over time. The system will provide standardized reporting capability for all federal, state, and local public health organizations.

In addition to the two information technology initiatives mentioned above, the Centers for Disease Control has provided direction to states in the area of improved communications and data security. The areas of communications include technologies such as cell phones, pagers, satellite broadcasts, video conferencing, and increased use of the Internet and electronic mail.

The CDC has placed emphasis on the need for robust, reliable, and secure data networks. Their direction mirrors the HIPAA direction regarding the need for increased security of data.

The Department of Health and Human Services (HHS) which oversees both the HIPAA and CDC emergency preparedness initiatives, has ensured that the guidance from both initiatives has a common theme regarding data security. Some examples include the need for Continuity of Operations, disaster recovery, data encryption, third party authentication, physical security, personnel security, and national standards.

### **3. IT Goals and Strategies**

As mentioned above, the goals for HIPAA include the implementation of the security improvements by April 2005. The original cost estimate for meeting these goals was in excess of one million dollars, which cannot be obtained via the General Fund due to statewide budget reductions. However, the requirements established by the CDC for increased physical,

personnel, and data security as it relates to emergency preparedness has included sufficient funding to not only meet the CDC requirements but to also satisfy the HIPAA requirements since they are basically the same.

Some of the steps necessary to meet these requirements have already been taken. Over the past two years the Department of Health and Mental Hygiene has

- constructed a centralized secure data center with redundant communications switching systems;

- connected to the state-wide data network (NetworkMD) which provides redundancy for Internet access and email services;

- established preliminary data encryption procedures;

- assessed network security;

- assessed department-wide disaster recovery procedures; and

- identified alternate locations for business continuity.

Additional steps for improving overall security include:

- the implementation of improved personnel security policies;

- establishment of an alternate data center site for disaster recovery;

- improvements in methodologies for single sign-on and data encryption;

- development of a redundancy for assuring the 24/7 operations for selected critical systems such as the Public Health Directory and the National Electronic Disease Surveillance System.

## **Managing For Results**

**Goal 1**      **Health Insurance Portability and Accountability Act (HIPAA)** – Lead DHMH efforts for compliance with the Health Insurance Portability and Accountability Act (HIPAA).

**Objective 1.1** To achieve 100% compliance with the development and implementation of project plans for each of the HIPAA Rules according to the mandated compliance dates.

**Strategy**      Facilitate technical, logistical and operational support for HIPAA compliance within DHMH.

**Performance Measure 1.1.a** Facilitation of department-wide HIPAA workgroups in undertaking and completing tasks according to the established project plan.

Outcome Measures	FY 2003	FY 2004	FY 2005
Privacy and Security Policies adopted as mandated	2	3	5
% of DHMH employees trained	80	100	100
% of Privacy and Security contract templates adopted and implemented	100	100	100
% of identified systems with capacity to accept standard transactions	50	100	100
% of identified systems that employ code sets	50	100	100
% of identified systems that employ Identifiers	50	100	100
% of identified functions utilizing Security standards	0	50	100

**Objective 1.2** Achieve 100% Information Resources Management Administration compliance with identified HIPAA requirements.

**Goal 2** **Bioterrorism and the Health Alert Network** – Provide IT solutions to support the Department’s response to bioterrorism or other public health threats.

**Objective 2.1** By June 30, 2005, public health professionals and their partners in emergency response will be actively enrolled in a statewide public health directory that is compliant with the CDC standards.

**Strategy** Collaborate with the CDC, other State Health Departments and Maryland public health and safety agencies on the design and standardization of the directory.

**Strategy** Procure hardware, software and services to implement and maintain the directory and support its alerting and notification capabilities.

**Performance Measure 2.2.a** Number of active participants.

Output Measure	FY 2002	FY 2003	FY 2004	FY 2005
Participants	0	0	100	3,000

<b>Outcome Measure</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Successful alert Notifications (%)	0	0	75	95

**Objective 2.2** Establish the capacity to provide responsive and appropriate conferencing and distance learning services to State and local health department employees utilizing audio/video and satellite technologies.

**Strategy** Procure hardware, software and services required to expand these services to meet State and local health department needs.

**Performance Measure 2.2.a** Number of sites tested and certified as complete according to contract agreements.

<b>Output Measure</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Equipped sites	0	8	17	23
<b>Outcome Measure</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Sites fully utilizing services (%)	0	34	75	100

**Goal 3** **DHMH Network** – Meet Department requirements for a robust and highly available network infrastructure, and maintain Department-wide Network Management.

**Objective 3.1** By June 30, 2005, the Wide Area Network (WAN) and the Internet will provide sufficient bandwidth to operate with 99% reliability within available resources.

**Strategy** Continued training of information technology support staff to improve technical knowledge, skills and abilities.

**Strategy** Procure hardware, software and services to maintain the infrastructure and network reliability.

**Performance Measure 3.1.a** Percentage of network reliability during business hours.

<b>Output Measures</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Wide Area Network Locations	81	90	109	120
Wide Area Network Bandwidth	1.54Mbps	1.54Mbps	1.54Mbps	1.54Mbps

Internet Bandwidth	10Mbps	10Mbps	10Mbps	15Mbps
<b>Outcome Measure</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Network Reliability (%)	99	99	99	99

**Objective 3.2** Consolidate network servers and core services from scattered offices throughout DHMH Headquarters to a newly designed central computer room.

**Strategy** Prepare highly available backbone infrastructure to originate from new core equipment area in new computer room.

**Strategy** After completion of the computer room, coordinate migration of network equipment with each Division's Network Administrator to minimize downtime.

**Performance Measure 3.2.a** Percentage of Administrations migrated to new computer room.

<b>Output Measure</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Administrations with network Equipment not currently located In the central computer room	*	*	*	*
<b>Outcome Measure</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Percentage of Administrations Migrated to computer room	N/A	N/A	75%	100%

## 4. IT Accomplishments

### Information System Division (ISD)

#### Web Development

**Legislative Tracking System:** The Office of Governmental Affairs (OGA) tracks all health-related legislation/bills that are introduced during the 90-day session of the Maryland General Assembly and coordinates the DHMH response as necessary. The Legislative Tracking System allows for the tracking and monitoring of over 800 bills and fiscal notes as well as tracking all pertinent information about the legislation. This system is deployed on the Internet, allowing users to track bills from any location in real time as the legislation progresses.

Each day during the session, OGA downloads the data from Annapolis. OGA then imports this data into the system's database. The new data is immediately available. OGA can add

their own information to each bill as well as assign it to the various liaisons for review. Legislative liaisons for each administration each have their own interfaces, allowing them to track bills that are of special interest while filtering out those bills for which there is no concern.

A series of reports based on the information imported and entered into the system is available to OGA staff and all liaisons. Each report is dynamically generated at the time of request, available on the internet, and can be printed out for distribution or meetings.

**Data Systems Inventory:** This system provides a set of online forms where staff throughout the DHMH can add the data systems that they manage. The staff members can manage their own list, making additions, edits, and deletions as needed. There is also a set of reports that can give an accurate and up to date overview of all the systems. The Data Systems Inventory provides a central location to store and track information about the vast number of data management applications used by DHMH.

**Content Management Strategy for Internet and Intranet Information:** The DHMH Intranet is designed to meet the needs of staff, as well as organizational strategic goals. The goals of the intranet can be defined in terms of communicating accurate information, improving staff efficiency, or providing an effective working environment.

Intranets can very easily grow to tens of thousands of pages. This growth continues steadily, reflecting the increasingly central role of many intranets in organizational strategy. The content of an intranet changes frequently, often daily. The most obvious manifestation of this are the intranet news pages, although many other pages will also change in a given day. It is for these reasons that we are currently developing a content management strategy, system, and dynamic Intranet to better manage this growth.

All content will be separated from the 'look and feel' of the pages that make up the Intranet. Rather than the current method of entering content and HTML markup in the same file, the content will be managed within a database and served from Active Server Page templates. Business rules will enable the design of a workflow of content from creator to editor; from a program manager's sign-off to the final publishing approval made by the DHMH Web team.

Information will be more accurate, with the ability to set publish and expiration dates, or to prompt the creator that an update is required. Staff efficiency will be elevated by giving those with basic computer skills the ability to update and manage the content for which they are responsible. An effective working environment will be created by providing a more useful source of information and functionality.

**Internet Multi-Media:** We have begun to distribute information employing recent advances in streaming media technology. This media can be streamed over the internet to users on demand, or distributed on CD. The content can include audio, video, animations of computer screen actions, and even power point presentations directly synchronized with the other media elements. Overall, this method will greatly improve the dissemination of complex information throughout the organization, the state, and ultimately, the public.



In a pilot program, we successfully deployed a series of meetings for the recent HIPAA Claims Processing System. The meetings were crucial to the project, but some participants could not attend. To keep these absentees informed, and to allow an opportunity for everyone to review the information covered, we created video documents of the meetings. These meetings are now available on the Internet and streamed instantly to the users. The presentation uses video, audio and synchronized PowerPoint slides. Users can jump to any point in the presentation as indexed in the PowerPoint outline. They can also return at a later time and automatically continue viewing at the exact point they left.

We are now preparing to deploy a CD of training lesson. This lesson will provide an animation of a technician's activities on a computer, showing the exact procedure to ensure that a PC is protected from harmful viruses or worms. While showing the procedure, the technician will provide a step-by-step narration of the process. This project will create a program of standardized procedures that will be easy to understand and review.

**Conference Registration:** To facilitate registrations to the upcoming Public Health Technology Conference, as well as future events, we developed a registration application and deployed it on the Internet. Here, attendees can obtain information about the various seminars being offered. Once they decide to attend, they can immediately register and choose their own itinerary from a schedule of seminars. Upon registering, the system provides the user with a confirmation page including their itinerary. The confirmation page suggests that they print this page and bring it on the day of the conference.

The registrations are collected in a central database. An administration module allows conference staff to view the registrants and keep aware of the number of registrants for each seminar. This will help the staff to better plan the room size and plan any possible cancellations of seminars for low attendance prior to the event. Also included in the administration module is the ability to lookup registrants by name, department, or seminar. This will enable the event staff to print a copy of the registrant's itinerary should they forget to bring it to the conference.

**Project Tracking System:** As part of the new DHMH Intranet, we have created a system to track projects through the development cycle. This system is intended to replace the current method of project reporting via static web pages. The new method of tracking will provide a clear and direct channel for project leaders to report on their progress. It will give managers a fast and accurate view of a complete set of information about projects. It will also show a history of the project, so managers will be able to track a project's progress over time.

The interface and functions are similar to those of MicrosoftProject. However, by developing this system on the Intranet, users interact with it via a Web browser thus eliminating the need to purchase expensive client licenses for each staff member.

**Hardware:** To coincide with the new computer room being put in place in DHMH, we are setting up a full-scale application development and hosting environment. This environment consists of redundant application and database servers, backup units, and streaming media

servers. The server architecture is designed to significantly increase the capacity to develop and host the applications listed above, as well as many future application projects.

### **System Development (ISD)**

**Maryland eGovernment:** Intranet and client-server system developed to show each department's progress in accomplishing the Maryland eGovernment Initiative. This involved accessing a database of eGovernment progress data, computing and reporting the statistics, and producing graphical statistics.

**Volunteer Services Administration:** Client-server system to track volunteer services and contributions, such as time donated or monies / property given. This information is kept for each volunteer office, on a monthly basis.

**Office of the Attorney General:** Client-server system to track Dentist board discipline cases and statuses. Reporting capabilities also incorporated.

**Office of the Attorney General:** Client-server system to track OAG attorney case information and statuses, and reporting capabilities. This system encompasses all cases within the DHMH OAG.

**IRMA Monthly Status Reporting:** Intranet system to reflect the status of each ongoing project. Statuses are converted to an internet page format, and placed within a menu system for easy access.

**IRMA – Data Entry:** Repaired and solved major hardware and software crash on Data Entry mid-level computer system, where contracted service company had no experience repairing. Ported applications from Unix mini-computer system to Novell based Client-server platform.

**Maryland Primary Care (Community Health Administration):** System implemented November 1999. This is a web-enabled extranet system used to provide basic health care services to those individuals between the ages of 16 and 64 that are not entitled to other health care and do not have private insurance.

**Contract Tracking System for Office of Contract Policy, Management & Procurement (OCPMP):** Implemented July 2003. This is a web-based system used to track basic information on contracts and modification to those contracts. Training for about 25 staff members.

**Customer Satisfaction Survey, Performance Excellence Coordinator:** Implemented April 2003. This is a web-based (Intranet) system used as a pilot for future web-based surveys. The survey gathered information on how users of DHMH services view the quality of services provided to them.

**Unified Grants Award:** Implemented May 2003. Developed Excel worksheet to link to other worksheets totaling the budget amounts. Also helped develop the process to allow these

worksheets to be saved and transmitted to ADC in a format that allows this information to be entered into FMIS. Also created Rumba (a terminal emulator program) templates to allow uploading of data to ADC with minimal effort.

**Childhood Blood Registry:** Implemented August 2003 in association with the Maryland Department of the Environment. This is a web-based (Intranet) system used by Local Health Departments to search for children's records for required blood lead testing. The historical database is operational and we are in the process of adding additional years of data.

### **Cigarette Restitution Fund Program (CRFP)**

**Core Funding:** Client-server system that tracks grant health funding for the Local Health departments.

**Minority Outreach Technical Assistance:** Client-server system designed to track the performance of Grantees through monthly and yearly reports. A checklist is included for report inventory purposes.

Completed the Data Source Directory developed in AS400-ASCII file format to list all the sources where the Cigarette Restitution related data could be obtained for the Director of The Cigarette Restitution Fund Program (CRFP). Then at the request of the Director changed it to Excel/Word format.

Completed Fiscal Reporting System in Excel format to list all the Cigarette Restitution funding distribution for an office director in the Community Health Administration.

Completed a CRFP "Contracts in Process" system in Excel format to list all the contracts distribution for the Chief of Contracting Office.

Completed Procurement System in Excel format to list all the procurement distributions for an office director in Community Health Administration and Contracting Office.

Revised the Stoplight program in Excel format to detect all projects' status (Green - completed, Amber - alert and Red - late) for the network/web development office in Community Health Administration to apply the program into MYSQL.

Completed the Cancer Data Source in Excel/Word format to list all the sources where the data could be obtained for an office director in Community Health Administration.

Completed the 3-matrix in Excel format to list the status of the projects for the Director of the Cigarette Restitution Fund Program.

Completed the first 35-page "prototype" of the CRFP Comprehensive Evaluation Report in Excel/Word format to list all the activities/projects/contracts status for the director of the Cigarette Restitution Fund Program.

Completed the CRFP Data Source Cross-reference program in Excel/Word format to cross-reference all the Cigarette Restitution data sources where the data could be obtained for the Director of the Cigarette Restitution Fund Program.

Completed the first 40-page “prototype” CRFP Cancer Comprehensive Evaluation Report in Excel/Word format to list all the cancer activities/programs status for the Director of the Cigarette Restitution Fund Program.

Completed the CRFP Document Tracking System with a 69-page user’s and system documentation in Word format to track all the in-and-out documents for the Director of the Cigarette Restitution Fund Program.

Completed a 33-page draft version of the “prototype” Comprehensive Evaluation on Minority Outreach Technical Assistance (MOTA) report in Excel/Word format to list all the activities/programs status for the Director of the Cigarette Restitution Fund Program.

Completed a 17-page “prototype” Comprehensive Evaluation report on Tobacco in Excel/Word format to list all the activities/programs status for the Director of the Cigarette Restitution Fund Program.

Completed an Executive Tracking System in Microsoft Access format to list all the programs (Tobacco MOTA, Cancer, Contracts and Procurements) status for the Director of the Cigarette Restitution Fund Program.

Completed the CRFP Local Public Health Components (Cessation, Community, Enforcement, Minority and School Based) in Microsoft Access format to list all the activities/programs related to Tobacco for an office director in Community Health Administration.

Completed the “Quarterly Status Report Form” report in Excel format to keep track of all projects status in a quarterly basis for the Project Management Office.

Modified the Health Care Foundation System in Microsoft Access to list all the activities/programs for one of the office director in Community Health Administration.

Developed a CRFP Requested Reports and Deliverable System in Microsoft Access format to list all the activities/programs/contracts for the Director of the Cigarette Restitution Fund Program.

## **Other**

Modified the Sexual Assault System in Microsoft Access format to keep track of all the rape victims in Maryland for an office director in Community Health Administration.

Completed the Maryland Business License Information project in Excel/Microsoft Access to locate where the information could be found from the proper State Agencies for the Governor's office per DHMH CIO's request.

Completed the assessment on the OCPMP Training Database System in Excel format to list all the training modules and who had taken what classes etc. and recommended the user from the Contracting Office to develop it in Microsoft Access format.

Modified the Office of the Inspector General Hotline System in Microsoft Access to record all complaints from any person/agency and then created a prototype Intranet/Web based system.

## **GIS Projects**

The GIS (Geographic Information Systems) project was started in 2001. GIS is a multi-faceted system of computer hardware, software, data, people, and methods. It is used to record, analyze, integrate, and display data that is based on geography. GIS have powerful visual display capabilities that present data and the results of analysis on maps thus adding intelligence to the data. GIS is a knowledge-based information system and is regarded as the best decision making technology for understanding and solving problems associated with government information which has a geographic dimension, e.g., a street address, a transportation corridor, a river, a city line. One of the most useful features of GIS is its ability to overlay different views of a location. This powerful ability to integrate different kinds of information about a location can lead to better-informed decisions (planning, research, managerial or operational) about public investments in infrastructure and services by adding value to data.

Our commitment is to increase DHMH's GIS capabilities. The functional objective is to serve as a source of knowledge to Department staff and to help them use GIS. Health professionals can use GIS as both a research and an analytical tool. One of the goals is to standardize all the geographic information in the department, so that everyone is using the identical data whether it be census data, parcel maps, etc.

### **Focus:**

- Providing on-line interactive services for ease of use and to maximize efficiencies.
- Develop and standardize use of browser template to stimulate use of GIS applications.
- Provide training and technical support for programmatic development.
- Develop outreach activities to stimulate ideas for the use of GIS.
- Provide/develop an atmosphere of customer service
- Develop guidelines, i.e., geocoding, geo-databases.
- Provide leadership in the GIS area.

### **Current Projects:**

Intranet development and applications on the web server - Interactive Health App (IHA) is an interactive Geographic Information System (GIS) tool that was created by customizing the standard GIS software, that integrates various data sources for spatial representation, query and analysis in an easy-to-use web application. IHA is designed and developed to enhance data efficiency, and data analysis. Its ease of use promotes and encourages GIS, and in this case it increases the comprehensive value of data and expands the scope of the analysis and query in subject. IHA provides the functionality of a complete GIS, yet the learning curve is decreased to a few hours training as opposed to several months. It is accessible via Internet Explorer 4.0 or above and secured. Data is standardized using the state and federal data standards, centralized and maintained within the GIS division. Thus, the complex process of using a Geographic Information System to solve health problems has been simplified and made possible for the researchers and specialists within the health department.

**DHMH Intranet website development:** Creating a page on the intranet where all interactive map users go to logon and activate their site.

**West Nile Virus:** Tracking for the Community Health Administration (CHA) for the past two years using locations of dead and/or infected birds and infected horses and humans. For 2003 we will track only infected horses and humans. Just completed a new online service for CHA showing 87 layers based on the different types of dead infected and non-infected animals and infected humans by week for 2002.

**Environmental Health:** Maryland is one of 17 states funded by a three-year CDC grant to improve the value of data resources in the area of environmental health. GIS has collaborated with CHA and the Maryland Department of Environment on a survey to be distributed within DHMH to determine the types of data available that are related to this environmental health study and use this to create Metadata for the project. In April we participated in the first planning meeting of the State's Environmental Public Health Tracking (EPHT) Project. In July three members of the GIS staff and Dr. Diane Matuzak, Director, CHA, attended the national conference in Chicago, where they participated in numerous work groups presented by CDC and presented a map demo. Two of our analysts are funded by this project. This grant also includes funds specifically for GIS which we have used to purchase additional hardware, software and training.

**Health Choice:** Maintain a service of interactive maps on the intranet containing various layers (providers, managed care organizations (MCO's), practices, etc) related to their mission on a statewide basis.

**Healthy Kids:** Maintain a service of interactive maps on the intranet containing various layers (providers, MCO's, practices, etc) related to their mission with the beginning emphasis on Prince George's County.

**Food Protection:** Created several static maps for the Food Protection program and continue to work with them on an ongoing basis. We will be using data provided by them for the emergency response system.

**Aids Administration:** Currently working with the administration to assist in geocoding of their data and to create maps for them on an intranet web site.

**Maryland Electronic Reporting Surveillance System (MERSS):** Testing project to allow counties to electronically add lab data to update MERSS database

**Emergency Response:** Have had several meetings to discuss the use of GIS as an integral part of the emergency response system. We will be creating an online GIS service with various health related data.

**Colorectal Cancer Survey:** Purchased software and hardware from the initial grant money. To date the only GIS assignments has been providing training to two employees.

**Family Health Administration:** Created numerous maps for FHA many of which are used for their rural health project.

**GeoMed03 Conference:** Have submitted an abstract for a presentation at this world-wide conference, which will be at University of Maryland Medical Center, Oct 15-17, 2003.

#### **HMIS – Hospital Management Information System (ISD)**

Developed and finalized a sole source contract with Creative Socio Medics Inc. (CSM) to provide DHMH with a HIPAA compliant translator for all electronic bills sent by the Division of Reimbursements (DOR) to Medicare and Medicaid. Although only Medicare B has been fully tested and put into production as of August 2003, Medicare A and Medicaid should be finalized and fully tested by October 1, 2003. Upon completion, this sole source contract will allow DHMH to 'cost avoid' fees of over \$600,000.00 dollars in HIPAA translator proposals obtained through the TORFP process.

Added new AS/400 to HMIS network to resolve capacity and throughput problems at Spring Grove Hospital and connectivity issues at RICA Rockville.

Initiated TORFP process to elicit proposals for an external evaluation of HMIS security systems and how they address HIPAA requirements. Final vendor responses were due by August 13, 2003. Winning proposal should be announced by the end of August 2003 notwithstanding budget limitations.

Developed and implemented a reporting function at Spring Grove Hospital Center that centralizes 'real time' bed availability for all State operated psychiatric inpatient centers.

Developed and implemented an electronic version of the Monthly Statistical Report for all State operated inpatient facilities. Although hard copy is still produced and mailed to select individuals, the bulk of the hardcopy mailing list will be replaced with electronic copies. Savings over the long run will be significant and the timeliness of the report, following the billing cycle, will be dramatic (hardcopy = 60 to 80 days, electronic copy = 3 days).

Successfully continued revenue generation (approximately \$75 million per year) from the HMIS billing module following sole source contract with AIMS Inc. to migrate to AS/400 environment (hardware and software) for Year 2000 compliance. New system has been operational from 1999 through 2003.

Successfully developed, implemented and maintained software module for JCAHO mandated ORYX performance measurement system beginning in 1999 and continuing through the present.

Replaced manual patient day reporting functions at Mental Hygiene Administration with electronic reports derived directly for the HMIS Census module. These reports will be sent to Budget Management Office (BMO) on a yearly basis.

Automated monthly electronic file creation for the Social Security Administration (SSA) to track all forensic cases admitted to State operated psychiatric facilities who would have received a jail sentence of one year or more.

#### **Quality Assurance Team (ISD)**

Implemented security monitoring and change control procedures for the Hospital Management Information System (HMIS). This was done to adhere to auditors' requirements for separation of duties, documented authorization of system changes, and limited and documented access to production data. Security monitoring procedures were implemented in October, 2001. Change control procedures were implemented in May, 2000.

Created processes and schedules for backing up, and for storage at an offsite location, all ISD supported mainframe files that were identified as critical files. The Annapolis Data Center (ADC) contracted with a vendor to provide offsite storage services. In the event that a major disaster occur at the ADC and it becomes necessary to process jobs at an alternate site, all files stored offsite will be transported by the vendor to the ADC hotsite facility. This project was initiated in December, 2002 and will remain open until after hotsite testing occurs, which is scheduled for November, 2003.

Performed quality assurance functions on IT systems developed by vendors contracted by various Administrations within the State. These services were first offered in August, 2000 and continue to be available upon request.

#### **Information Technology Support Divisions (ITSD)**

Converted internet connectivity from Qwest communications to nwMD.

Increased internet bandwidth from 10Mb to 20Mb to meet the Departments growing requirements.

Connected Montgomery Plaza to the DHMH WAN via nwMD layer 2 services



Installed and implemented necessary network equipment to facilitate moving Office of Food Protection (Hagerstown) to Potomac Center, HSCRC and MHCC to Reisterstown Road Plaza, and Office of Legislative Affairs (Annapolis Office) to the DBM building 45 Calvert Street, Annapolis.

Redesigned to network backbone, to full duplex switched Gigabit, in the O'Connor building. The redesign of the backbone included a Cisco 6513 core switch, 7 Cisco 4000 switches, 16 Cisco 3550 switches, and a Cisco 7206 VXR router.

Redesigned Potomac Center's network to include 2 additional buildings.

Installed and configured upgraded infrastructure equipment for Spring Grove Hospital Center.

Designed and implemented a network plan for the DHMH Emergency Command Center in Carroll County.

Designed a network redundancy plan for Eastern Shore Hospital Center.

To reduce hardware maintenance costs as well as administrative effort, connectivity for the CARES system in 20 counties was converted to use a Host Integration Server. By doing this all communication is over DHMH's existing WAN circuits, saving the costs for the old duplicative circuits. The conversion also prompted the removal of aging costly controllers. To improve reliability ITSD installed upgraded routers in 20 of the original WAN sites.

Designed, configured, and installed ISDN PRI and equipment for Medicaid's new EDITPS system.

Upgraded enterprise servers to Netware 6.0

To replace an NCR server in Data Entry, for which new replacement parts are not available, installed a new Netware server and loaded Formware.

For redundancy and reliability ITSD installed two new additional DNS Enterprise servers.

Redesigned GroupWise system and installed additional servers to enhance overall reliability.

Configured and installed GroupWise Email server for RICA Rockville.

Procured, coordinated, and provided oversight for 34 cable installation projects.

Technicians responded to 6,017 helpdesk tickets.

Consulted and served on hiring committees for Community Health Administration and Vital Records.

Performed numerous computer forensics investigations throughout DHMH.

Designed and installed network cabling and equipment layout for the new Data Center, as well as provided oversight during the construction period for the Data Center.

Designed and implemented connectivity, for eighty (80) new locations, to the DHMH WAN for the following Local Health Departments and Administrations:

- 65 locations for Family Health Administrations (WIC)
- 1 location for Medicaid
- 9 locations for Worcester County Health Department
- 1 location for Washington County Health Department
- 1 location for Dorchester County Health Department
- 1 location for Talbot County Health Department
- 1 Baltimore City Health Department
- 1 location for Somerset County Health Department

## **Data Eradication**

The data eradication project was initiated in May, 1999 to ensure that data was eradicated from excessed equipment. After initially using data eradication software, in 2001 the decision was made to have hard drives shredded by a contractual vendor. IRMA updated the Data Eradication Guidelines and requested and received approval from the Health Information Coordinating Council (HICC).

More recently, we have expanded our efforts to include the destruction of other media: magnetic tapes, magnetic tape cartridges, floppy disks, CD-ROMS, fax machine cartridges and copy machine cartridges. We have selected a second outside vendor to deal specifically with other media. We have extended our services statewide to include 86 DHMH Business Units and we conduct an annual survey to measure the current demand for our services. We also offer a monthly Information Session/Training Class on data eradication.

Data Eradication Services are important to DHMH because they protect the department from the liability associated with the risk of improper handling of public health data. The extent of this liability is now more widely recognized with the implementation of the HIPPA regulations and with the new emphasis on Homeland Security.

### [DHMH Data Eradication Procedures](#)

## **5. Electronic Government Initiative**

Prior to the passage of legislation requiring State agencies to provide information to the public using both static and dynamic web pages on the Internet, the Department of Health and Mental Hygiene had already undertaken numerous initiatives for this purpose. Every major organization in the Department including licensing boards and commissions, hospital facilities, county health

departments, and program offices have web pages. DHMH programs providing services directly to the public, such as the HealthChoice program, Maryland Children's Health Program, Pharmacy program, and Division of Vital Records have significant amounts of information available online, including application guidance and forms. In addition, since 1997 every major application system has been developed using Internet technologies.

As the department identifies legacy systems, particularly mainframe-based applications, for replacement, they are developed for operation using Internet based technologies. In support of this direction, the department has invested heavily in training for incumbent information technology staff, extensively expanded the capacity and capability of networking technology, constructed a central highly secure data center, employed security technologies such as VPN, and issued numerous policies and guidelines regarding the protection of highly sensitive data.

By fiscal year 2005, all of the licensing systems for professional health care workers (physicians, dentists, nurses, etc.) will have been moved from the mainframe to client/server technology. In fiscal year 2005 these systems will be upgraded to provide the capability for license renewals over the Internet.

By fiscal year 2005 the department will be implementing an Internet based application system for the reporting of infectious diseases. This application will be fully compatible with the National Electronic Disease Surveillance Systems (NEDSS) implemented by the Center for Disease Control (HHS), and be accessible by all County Health Offices.

A national public health director system will be implemented with each State implementing it's own version of this system which will be based upon the lightweight data access protocol (LDAP) and be Internet accessible. The directory will identify all public health participants, including primary clinical personnel, their roles, and contact information covering all jurisdictions.

Numerous small application systems will be deployed over the next few years, as funding becomes available. Most of the applications will be developed using in-house staff and most will be below reportable thresholds.

## **B. FUTURE AGENCY IT ENVIRONMENT**

The Department of Health and Mental Hygiene is in the process of developing a highly secure, reliable network that is accessible by all organizations in the department. Two major federal initiatives, HIPAA and bio-terrorism, have begun in recent years. There is significant overlap in some areas of these initiatives such as data security and standardized data reporting. A major aspect of the bio-terrorism initiative is the mandatory use of the Internet.

Activity has been underway for the past few years to expand our capacity for communications, use of the Internet, security of highly sensitive data, and development of new information systems that are compatible with similar national systems. Three of the major goals in these federal initiatives are:

a) To rapidly detect a terrorist event through a highly functioning, mandatory reportable disease surveillance system, as evidenced by ongoing timely and complete reporting by providers and laboratories in a jurisdiction, especially of illnesses and conditions possibly resulting from bio-terrorism, other infectious disease outbreaks, and other public health threats and emergencies.

b) To ensure effective communications connectivity among public health departments, healthcare organizations, law enforcement organizations, public officials, and others as evidenced by: 1) continuous high speed connectivity to the Internet; 2) routine use of e-mail for notification of alerts and other critical communications; and 3) a directory of public health participants (including primary clinical personnel), their roles, and contact information covering all jurisdictions.

c) Secure electronic exchange of clinical, laboratory, environmental, insurance and billing claims, and other public health information in standard formats between the computer systems of public health partners.

The department has over 100 locations throughout the State where public health organizations and staff are housed. Each of these locations will be connected to the department via Network Maryland's statewide network. Effective security of systems and data requires that each system have reliable disaster recovery plans. Alternate sites must be available in order to recover systems in the event of a major disaster. The department will have developed plans for backup site for all critical systems by 2005, preferably in cooperation with other state agencies.

## **SECTION FOUR - AGENCY INFORMATION TECHNOLOGY INVESTMENT PORTFOLIO**

### **A. IT PROJECT SUMMARIES**

1. Alcohol & Drug Abuse Administration (eSAMIS)
2. Laboratories Administration – Automation of Laboratory Testing Database and Reporting
3. Medicaid – Acquisition of EDI Software for MMIS
4. Medicaid – Electronic Funds Transfer for Pharmacy Electronic Reimbursements
5. Medicaid – Point of Sale – Electronic Claims Management Network
6. Medicaid – MMIS Operations & Maintenance Support Task Order
7. Boards & Commissions

## 1) ADAA (eSAMIS)

Section	Title	Description
1.	Project Title	Electronic Substance Abuse Management System (eSAMIS)
2.	Major Project Y/N	Yes
3.	Project Description	<p>The Alcohol and Drug Abuse Administration (ADAA) is developing and implementing an electronic web-enabled data management system to assess treatment program performance and provide individual programs with the ability to utilize their clinic data to make service delivery improvements. This system is expanding upon the data elements collected by the ADAA Substance Abuse Management Information System (SAMIS). SAMIS contains information on all client admissions to and discharges from the State certified programs in Maryland.</p> <p>The enhanced system utilizes and improves upon the technology and infrastructure of the HIDTA Automated Tracking System (HATS) client-server software operated by the University of Maryland Bureau of Government Research (BGR) currently being used in some jurisdictions as a data collection and communication tool between treatment programs and criminal justice agencies. The new system allows the ADAA, working with BGR and the University of Maryland Center for Substance Abuse Research (CESAR), to continuously monitor and analyze what kinds of treatment services are most successful for specific client populations so that the services can be replicated statewide. The new system will also ensure that programs are collecting vital data that can be used to improve program practices. With increasing demands for accountability for ADAA's substance abuse treatment resource allocation, the agency must develop a defensible performance measurement system that takes advantage of some of the most advanced information technology.</p>
4.	Project Management	Lucinda Shupe, Division Director of Information Services Jeffrey Allison, Project Manager
5.	Project Status	The project is currently in the testing phase with 31 pilot sites participating in a test of the eSAMIS design. The web-based system is in development with initial testing to begin shortly. Overall, the project is on time and within budget.
6.	Project Estimated Cost	Total costs all years FY 03 – FY 09: \$6,050,000

7.	Major Milestones	<p>Bureau of Governmental Research (BGR) Major Milestones FY04 to FY05</p> <p>FY2004</p> <ul style="list-style-type: none"> <li>• Provide eSAMIS system maintenance, continued installation and training as treatment programs transition to e-reporting</li> <li>• Continue education and training of remaining certified treatment programs to report on new eSAMIS system</li> <li>• Implement and monitor mechanisms for ongoing data transfer between BGR, ADAA, and CESAR</li> <li>• Analyze, Design, Develop and Test eSAMIS software enhancements</li> </ul> <p>FY2005</p> <p>Provide e-SAMIS system maintenance, continued installation and training for treatment programs using e-SAMIS reporting system</p> <p>Provide education and training of newly certified treatment programs and new staff in existing programs to report on e-SAMIS system</p> <p>Modify and enhance mechanisms for ongoing data transfer between BGR, ADAA, and CESAR</p> <p>Center for Substance Abuse Research CESAR FY 03 Activities</p> <p>Monitoring Client Outcomes</p> <p>Method 1: Administrative Data Linking</p> <p>Analyze data</p> <p>Produce preliminary report on employment outcomes</p> <p>Produce preliminary report on arrest outcomes</p> <p>Present results to Advisory Committee</p> <p>Primary Data Collection</p> <p>Write draft protocol, then circulate for review and write final protocol.</p> <p>Sample 300 clients from 30 pilot programs</p> <p>Meet with providers to discuss logistics</p> <p>Begin data collection</p> <p>Analyze data</p> <p>Follow-up assessment package and produce final report</p>
8.	Managing For Results (MFR)	MFR not reported
9.	List of Other Projects Impacted by this Project	<ul style="list-style-type: none"> <li>• None</li> </ul>
10.	List of System Interfaces	<ul style="list-style-type: none"> <li>•</li> </ul>

*Department of Health and Mental Hygiene  
Information Technology Master Plan, FY 2005*

6. (Detail)

<b>Development/Enhancement</b>	<b>Prior to FY2003</b>	<b>FY 2003 Actual</b>	<b>FY 2004 Approp.</b>	<b>FY 2005 Bud Req</b>	<b>FY2006 Projected</b>	<b>FY2007 Projected</b>	<b>FY 2008 Projected</b>	<b>FY2009 Projected</b>	<b>Total</b>
<b>Services</b>									
General Funds									
Special Funds		1,300,000	750,000						2,050,000
Federal Funds									
<b>Sub Total</b>		<b>1,300,000</b>	<b>750,000</b>						<b>2,050,000</b>
<b>Development/Enhancement</b>									
<b>Infrastructure</b>									
General Funds									
Special Funds									
Federal Funds									
<b>Sub Total</b>									
<b>Dev/Enh Total</b>		1,300,000	750,000						
<b>Operations/Maintenance</b>									
General Funds				800,000	800,000	800,000	800,000	800,000	4,000,000
Special Funds									
Federal Funds									
<b>O&amp;M Total</b>				<b>800,000</b>	800,000	800,000	800,000	800,000	<b>4,000,000</b>
<b>Grand Total</b>		<b>1,300,000</b>	<b>750,000</b>	800,000	800,000	800,000	800,000	800,000	<b>6,050,000</b>

## 2) LABORATORIES ADMINISTRATION (Automation of Laboratories Testing Database and Reporting)

Section	Title	Description
1.	Project Title	Automation of Laboratory Testing Database and Reporting
2.	Major Project Y/N	No
3.	Project Description	This project will computerize all laboratories using the LITS Plus system developed by CDC. It is Windows-based and runs on a SQL Server 2000 platform on a LAN. The project also includes the infrastructure upgrades needed for the system.
4.	Project Management	Mr. Brian K. Stallsmith, CNA
5.	Project Status	The project is in the Development phase.
6.	Project Estimated Cost	See Details Below
7.	Major Milestones	Infrastructure upgrade: FY 2004 LITS Plus software acquisition: FY 2004 Pilot module implementation: FY 2005 Complete implementation: FY 2008
8.	Managing For Results (MFR)	Supports MFR Goal 2.2.3 by improving turnaround time by rapid electronic reporting of test results via automated faxing.
9.	List of Other Projects Impacted by this Project	<ul style="list-style-type: none"> <li>The Laboratory Relational Database System (LRDS) being replaced by LITS Plus.</li> </ul>
10.	List of System Interfaces	<ul style="list-style-type: none"> <li>LITS Plus will interface with NEDSS for transmission of Public Health data to other Federal, State, and Local agencies.</li> </ul>

### 6. (Detail)

Development/Enhancement	Prior to FY2003	FY 2003 Actual	FY 2004 Approp.	FY 2005 Bud Req	FY2006 Projected	FY2007 Projected	FY 2008 Projected	FY2009 Projected	Total
<b>Services</b>									
General Funds									
Special Funds									
Federal Funds									
<b>Sub Total</b>									<b>0</b>
<b>Development/Enhancement Infrastructure</b>									
General Funds	118,500	81,411	44,350						244,261
Special Funds									
Federal Funds		87,600	137,400	205,000					430,000
<b>Sub Total</b>	<b>118,500</b>	<b>169,011</b>	<b>181,750</b>	<b>205,000</b>					<b>674,261</b>
<b>Dev/Enh Total</b>	<b>118,500</b>	<b>169,011</b>	<b>181,750</b>	<b>205,000</b>					<b>674,261</b>
<b>Operations/Maintenance</b>									
General Funds	51,572	50,373	51,945	51,273	51,273	51,273	51,273	51,273	410,256
Special Funds									
Federal Funds									
<b>O&amp;M Total</b>	<b>51,572</b>	<b>50,373</b>	<b>51,945</b>	<b>51,273</b>	<b>51,273</b>	<b>51,273</b>	<b>51,273</b>	<b>51,273</b>	<b>410,256</b>
<b>Grand Total</b>	<b>170,072</b>	<b>219,384</b>	<b>233,695</b>	<b>256,273</b>	<b>51,273</b>	<b>51,273</b>	<b>51,273</b>	<b>51,273</b>	<b>1,084,517</b>



### 3) MEDICAID (Acquisition of EDI Software for MMIS)

Section	Title	Description
1.	Project Title	Acquisition of EDI Software for MMIS
2.	Major Project Y/N	Yes – New Development
3.	Project Description	<p>The Office of Operations and Eligibility develops and maintains the MMIS system to ensure prompt and accurate payment to providers of health care services. It maintains files of approved providers of services and Maryland residents certified as eligible to receive services through the Medicaid Program. This Project entails bringing the MMIS system into Health Insurance Portability and Accountability Act (HIPAA) compliance. This involves the selection and procurement of the Electronic Data Interface Translator, monitoring the installation and tailoring of the base translator software, modification of the MMIS to interface with the EDI Translator, evaluation of the existing infrastructure to support the addition of the EDI translator to the MMIS, and critical review of performance in the initial start-up period.</p> <p>The purpose of the Project is to accomplish HIPAA Transaction compliance by October 16, 2003. The scope of the effort and its impact are wide-ranging. All business processes and systems are affected. The Health Insurance Portability and Accountability Act (HIPAA), Public Law 104-191, was signed on August 21, 1996. In addition to the subject referenced in its title, the Act set forth an objective for Administrative Simplification. “It is the purpose of this subtitle to improve the Medicare program under Title XVIII of the Social Security Act, the Medicaid program under Title XIX of such Act, and the efficiency and effectiveness of the health care system, by encouraging the development of a health information system through the establishment of standards and requirements for the electronic transmission of certain health information.” HIPAA regulations have adopted standards for electronic transactions and standards for code sets.</p> <p>The expected outcome at project completion is HIPAA compliance to the final rules on Standards for Electronic Transactions in order for the Medical Care Program to meet its obligations to both its customers and taxpayers by providing quality services in a most effective and timely manner. Therefore, this project significantly modifies, both, MMIS’ infrastructure and applications.</p>

4.	Project Management	Mr. John Bohns, Division Chief, Division of Management Information Systems. Office of Operations and Eligibility, MCP
5.	Project Status	HIPAA is a federal law that the Medicaid Program must comply with on or before October 16, 2003. This law establishes national standards for electronic data interchange (EDI) between Medicaid and health care providers who wish to be paid for services rendered to Medicaid clients. This is a New Systems Development Project which, when completed, should improve the efficiency of claim payment at significantly lower cost. This multi-year project establishes a timeline for the transition of every major health transaction in the Medicaid Program to a standard form. Transactions are being designed, developed, tested and deployed on a prioritized transaction by transaction basis. The three 837 transactions (programs) have been loaded into EDIFECs Commerce Desk for Trader Partner testing. An 835 test transaction will be placed on Commerce Desk for the Trade Partners to download and test with. The Companion Guides have also been loaded. Forty-two Trading Partners have signed on for testing through Commerce Desk and nine are actively testing. Communications Handler is being implemented. Front end Portal web based application for EDITPS has been designed, developed and tested. The Connect: Direct process from MMIS to EDITPS has been configured and tested.
6.	Project Estimated Cost	See below.
7.	Major Milestones	See chart below.
8.	Managing For Results (MFR)	See below
9.	List of Other Projects Impacted by this Project	<ul style="list-style-type: none"> <li>• <b>Internal Agency Projects</b> – At the present time, there are several on-going HIPAA Projects at DHMH.</li> <li>• <b>Other MD Agency Projects</b> – HIPAA is a nationwide implementation, encompassing both the private and public sector. Any Agency that deals directly with a health care provider may be affected.</li> <li>• <b>Other Federal, County, Municipal or Private Projects</b> – The HIPAA Initiative of the Federal government is a nationwide implementation and it is considered by health care economists and other analysts as one of the most significant changes in the practice of health care in many decades; one that will directly impact Maryland providers, patients and insurers in both the private and public sectors.</li> </ul>

10. List of System Interfaces Multiple health care providers.

## 6. Project Estimated Costs (Detail)

Development/Enhancement Services	Prior to FY2003	FY 2003 Actual	FY 2004 Approp.	FY 2005 Bud Req	FY2006 Projected	FY2007 Projected	FY 2008 Projected	FY2009 Projected	Total
General Funds	\$42,614	0	0	0	0	0	0	0	\$42,614
Special Funds		\$169,130	\$127,250	\$63,625	\$24,981	\$24,981	\$24,981	\$24,981	\$459,930
Federal Funds	\$121,287	\$475,644	\$372,750	\$186,375	\$73,177	\$73,177	\$73,177	\$73,177	\$1,448,763
<b>Sub Total</b>	<b>\$163,901</b>	<b>\$644,774</b>	<b>\$500,000</b>	<b>\$250,000</b>	<b>\$98,158</b>	<b>\$981,580</b>	<b>\$981,580</b>	<b>\$981,580</b>	<b>\$1,951,307</b>
<b>Development/Enhancement Infrastructure</b>									
General Funds	\$20,131	0	0	0	0	0	0	0	\$20,131
Special Funds		\$91,070	\$127,250	\$127,250	\$37,472	\$37,472	\$37,472	\$37,472	\$495,457
Federal Funds	\$57,295	\$256,116	\$372,750	\$372,750	\$109,765	\$109,765	\$109,765	\$109,765	\$1,497,972
<b>Sub Total</b>	<b>\$77,426</b>	<b>\$347,186</b>	<b>\$500,000</b>	<b>\$500,000</b>	<b>\$147,237</b>	<b>\$147,237</b>	<b>\$147,237</b>	<b>\$147,237</b>	<b>\$2,013,560</b>
<b>Dev/Enh Total</b>	<b>\$241,327</b>	<b>\$991,960</b>	<b>\$1,000,000</b>	<b>\$750,000</b>	<b>\$245,395</b>	<b>\$245,395</b>	<b>\$245,395</b>	<b>\$245,395</b>	<b>\$3,964,867</b>
<b>Operations/Maintenance</b>									
General Funds	0	0	0	0	0	0	0	0	0
Special Funds	0	0	0	\$63,625	\$187,359	\$187,359	\$187,359	\$187,359	\$813,061
Federal Funds	0	0	0	\$186,375	\$548,826	\$548,826	\$548,826	\$548,826	\$2,381,061
<b>O&amp;M Total</b>				<b>\$250,000</b>	<b>\$736,185</b>	<b>\$736,185</b>	<b>\$736,185</b>	<b>\$736,185</b>	<b>\$3,194,740</b>
<b>Grand Total</b>	<b>\$241,327</b>	<b>\$991,960</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$981,580</b>	<b>\$981,580</b>	<b>\$981,580</b>	<b>\$981,580</b>	<b>\$7,159,607</b>

## 7. Major Milestones

Phase	Major Milestones	Planned Start Date	Actual Start Date	Planned End Date	Actual End Date
Initiation/ Concept	<p>*****</p> <p><b>Milestone 1 - SE Vendor Orientation</b></p> <p>*****</p> <p>EDI Translator Software Purchase Order</p> <p>*****</p> <p>Update Project Plan</p> <p>*****</p> <p>On-Site Vendor Requirements</p> <p>*****</p>	7/01/02	6/19/02	7/25/02	7/26/02
Planning/ Req. Analysis	<p>*****</p> <p><b>Milestone 2 - EDI Translator Software Provider Orientation</b></p> <p>*****</p> <p>Project Plan Update</p> <p>*****</p>	7/08/02	8/01/02	8/29/02	8/21/02
Design / Development / Integration /	<p>*****</p> <p><b>Milestone 3 - EDI Translator Software Tailoring to MMIS</b></p> <p>*****</p>	8/02/02	8/14/02	9/1/03	

<b>Test</b>	<b>EDI Translator Installation</b> ***** <b>Training, Testing and Implementation Plans</b> ***** <b>Milestone 4 – MMIS Tailoring</b> ***** ***** ***** <b>Milestone 5 – Related Architectural Needs</b> <b>Milestone 6 – Test Environment Installation, Testing and Implementation</b>	8/2/02 ***** 10/7/02 ***** 7/15/02 ***** 1/15/03 ***** 2/17/03	8/2/02 ***** 10/7/02 ***** 7/15/02 ***** 1/15/03 ***** 2/17/03	10/11/02 ***** 9/1/03 ***** 10/16/03 ***** 10/16/03 ***** 10/16/03	10/11/02
<b>Implementation</b>	***** <b>Milestone 7 Production Environment Installation, Testing and Implementation</b> *****	2/3/03	2/3/03	10/16/03	
<b>Operations / Maintenance</b>	***** <b>Milestone 8 - Monitoring of Initial Operations</b> *****	10/16/03		On-going System.	

[Requirements note – provide capability to enter as many as 5 milestones under each phase.]

## 8. MFR

### MQ.01 Medical Care Programs Administrations – FY 2005 MFR

**Goal 3** – Maximize the effectiveness of operations of the Medical Care Programs

**Objective 3.2** – For FY 2005, even during the HIPAA implementation, at a minimum, DHMH will pay at least 90% of all clean fee for service claims within 30 days of receipt.

**Critical Success Factors (CSF):** Provide a summary of the performance measures that will be used to measure the success of this project.

<b>Performance Measures:</b>	<b>2002 Actual</b>	<b>2003 Actual</b>	<b>2004 Estimated</b>	<b>2005 Estimated</b>
Quality: Number of Clean Claims Processed	28,730,080	30,500,000	*26,000,000	*26,000,000
Percent Processed in Less Than 30 Days	95%	97%	**90%	**90%

\* Reduction in claims processed is due to a change in the administrative process which is anticipated to reduce the number submitted.

\*\* Reduction in claims processed within 30 days is due to HIPAA implementation which initially will negatively impact efficiency until all stakeholders' systems are in place and fully functioning.

#### 4) MEDICAID (Electronic Funds Transfer)

Section	Title	Description
1.	Project Title	Electronic Funds Transfer for Pharmacy Electronic Reimbursements
2.	Major Project Y/N	No
3.	Project Description	Medicaid payments to interested pharmacies will be made electronically instead of by paper checks. This Project will enable the Medicaid Program to meet its obligation to the pharmacy providers of the Maryland Medical Assistance Program by providing a more efficient methodology for reimbursement to pharmacies required by HB 208 and SB 376. The EFT will reflect savings that will be achieved by switching from checks to EFT payment to pharmacies.
4.	Project Management	
5.	Project Status	In the Planning Phase - A Current Services Budget Request has been submitted for FY 2005.
6.	Project Estimated Cost	See - 6. Detail section, below:
7.	Major Milestones	None
8.	Managing For Results (MFR)	<b>Goal 3</b> - Maximize the efficiency and cost effectiveness of the Medical Care Program A reduction in cost from \$0.39 to \$0.06 to remit Medicaid payments to pharmacies would support.
9.	List of Other Projects Impacted by this Project	<ul style="list-style-type: none"> <li>MMIS, HIPAA, Pharmacy FX System</li> </ul>
10.	List of System Interfaces	<ul style="list-style-type: none"> <li>MMIS, HIPAA, Pharmacy FX System</li> </ul>

#### 6. (Detail)

Development/Enhancement	Prior to FY2003	FY 2003 Actual	FY 2004 Approp.	FY 2005 Bud Req	FY2006 Projected	FY2007 Projected	FY 2008 Projected	FY2009 Projected	Total
<b>Services</b>									
General Funds			0	138,346					138,346
Special Funds									
Federal Funds			0	393,755					393,755
<b>Sub Total</b>			<b>\$ 0</b>	<b>\$ 532,101</b>					<b>\$ 532,101</b>
<b>Development/Enhancement Infrastructure</b>									
General Funds									
Special Funds									
Federal Funds									
<b>Sub Total</b>									
<b>Dev/Enh Total</b>									
<b>Operations/Maintenance</b>									
General Funds					2,469	2,493	2,518	2,543	10,023
Special Funds									
Federal Funds					7,026	7,097	7,168	7,240	28,531
<b>O&amp;M Total</b>					<b>\$ 9,495</b>	<b>\$ 9,590</b>	<b>\$ 9,686</b>	<b>\$ 9,783</b>	<b>\$ 38,544</b>
<b>Grand Total</b>			<b>\$ 0</b>	<b>\$ 532,101</b>	<b>\$ 9,495</b>	<b>\$ 9,590</b>	<b>\$ 9,686</b>	<b>\$ 9,783</b>	<b>\$570,655</b>

## 5) MEDICAID (Point of Sale – Electronic Claims Management Network)

Section	Title	Description
1.	Project Title	Point of Sale – Electronic Claims Management Network
2.	Major Project Y/N	No
3.	Project Description	<p>The Program issued a Request for Proposal (RFP) to initiate the procurement process to secure a Point-of-Sale contractor commencing January 1999. As a result, the RFP included comprehensive pharmacy service needs of HealthChoice, the Specialty Mental Health System, the remaining fee-for-service system, mandatory MBE requirements, system enhancements, Coordinated PRO-DUR, in addition to the continued management of the Federal and State Rebate Programs. In addition, the prospective vendor was also requested to incorporate the stand-alone Kidney Disease Program's pharmacy processing operations and management of the Rebate Program. The Kidney Disease Programs component is budgeted separately in their operating budget.</p> <p>FY 2004 represents the exercise of the fourth of five one-year renewal options for the continued operations and management of the Medicaid Point of Sale Electronic Claims Management Network and Rebate Programs. However, the Program found it necessary to increase funding due to the increase in the claims processing volumes. An additional funding request for FY 04 is based on the increase in claims volume and charge due to the new SX system.</p> <p>Due to the National Health Insurance Portability and Accountability Act (HIPAA), the vendor is now required to modify the existing pharmacy claim adjudication system in order to be HIPAA compliant. HIPAA necessitates that all pharmacy claims be identified by a universal code called the National Council for Prescription Drug Programs (NCPDP) transaction standard. The vendor will need to develop a new system called First SX. The development of this new system will include the conversion of the current POS system to First SX, conversion of one year of claims history, provider training, conversion to NCPDP and conversion of current coverage plans to the First SX system.</p>
4.	Project Management	James Demery

5.	Project Status	Due to the National Health Insurance Portability and Accountability Act (HIPAA), the POS <u>First SX</u> IT Project (conversion/HIPPA compliance) was completed in FY 2003. The POS' vendor successfully completed the required enhancements to the existing pharmacy claim adjudication system in order to be HIPAA compliant. The Operations & Maintenance returned to normal operation in FY 2004.
6.	Project Estimated Cost	See below.
7.	Major Milestones	The POS FX – IT Project was completed in FY 2003. The Operations & Maintenance returned to normal operation in FY 2004.
8.	Managing For Results (MFR)	MQ.01 Medical Care Programs Administrations – FY 2005 MFR.

**Goal 3** - Maximize the effectiveness of operations of the Medical Care Programs

**Objective 3.2** - For FY 2005, even during the HIPAA implementation, at a minimum, DHMH will pay, at least, 90% of all clean fee-for service claims within 30 days of receipt.

**Critical Success Factors (CSF):** *Provide a summary of the performance measures that will be used to measure the success of this project*

**Performance Measures:** (See below)

9.	List of Other Projects Impacted by this Project	<ul style="list-style-type: none"> <li>• <b>Internal Agency Projects</b> – At the present time, there are several on-going HIPAA Projects at DHMH.</li> <li>• <b>Other MD Agency Projects</b> – HIPAA is a nationwide implementation, encompassing both the private and public sector. Any Agency that deals directly with a health care provider may be affected.</li> <li>• <b>Other Federal, County, Municipal or Private Projects</b> – MCO/Managed Care Org. Pharmacies/Providers in the State of Maryland.</li> </ul>
10.	List of System Interfaces	MMIS, HIPAA, Pharmacy FX System

6. (Detail)

Development/ Enhancement	Prior to FY2003	FY 2003 Actual	FY 2004 Approp.	FY 2005 Bud Req	FY2006 Projected	FY2007 Projected	FY 2008 Projected	FY2009 Projected	Total
<b>Services</b>									
General Funds									
Special Funds									
Federal Funds									
<b>Sub Total</b>									
<b>Development/ Enhancement</b>									
<b>Infrastructure</b>									
General Funds									
Special Funds									
Federal Funds									
<b>Sub Total</b>									
<b>Dev/Enh Total</b>									
<b>Operations/ Maintenance</b>									
General Funds		\$627,979	\$726,194	\$745,560	\$779,407	\$806,359	\$834,658	\$881,399	\$5,401,555
Special Funds									
Federal Funds		\$1,787,324	\$2,066,860	\$2,121,980	\$2,218,312	\$2,295,020	\$2,375,564	\$2,508,596	\$15,373,656
<b>O&amp;M Total</b>		\$2,415,303	\$2,793,054	\$2,867,540	\$2,997,719	\$3,101,379	\$3,210,222	\$3,389,994	\$20,775,211
<b>Grand Total</b>		\$2,415,303	\$2,793,054	\$2,867,540	\$2,997,719	\$3,101,379	\$3,210,222	\$3,389,994	\$20,775,211

8. MFR Performance Measures

Performance Measures:	2002 Actual	2003 Actual	2004 Estimated	2005 Estimated
<b>Quality: Number of Clean Claims Processed</b>	28,730,080	30,500,000	26,000,000	26,000,000
<b>Percent Processed In Less Than 30 Days</b>	95%	97%	90%	90%



## 6) MEDICAID (MMIS Operations & Maintenance Support Task Order)

Section	Title	Description
1.	Project Title	MMIS Operations & Maintenance Support Task Order
2.	Major Project Y/N	No
3.	Project Description	<p>A Task Order Request for Proposals (TORFP) was issued to acquire operations and maintenance support under the Software Engineering Functional Area of the TSP. This is a Master Task designed to acquire mainframe application developers and specialists to support development, enhancement, and maintenance of the Medicaid Management Information Systems (MMIS) application and supporting network applications.</p> <p>Specifically, enhancement and maintenance are needed for the MMIS Claims Subsystem, Recipient Subsystem, MARS Reporting Subsystem, and information retrieval system, as mandated by the federal and state government. The contractor selected, Computer Sciences Corporation (CSC), has met the requirements and will provide services based on the specifications of the documents listed in the Task Order Agreement (TOA). This contractor agrees to provide services during the period of June 1, 2002 through April 30, 2003 with two (2) one (1) year options.</p> <p>The federally mandated MMIS presently consists of 6 core subsystems: Recipient; Provider; Claims processing; Reference file; Surveillance and Utilization Review; Management and Administrative Reporting. For Maryland, subsystems support all of the following functions: Buy-in; HealthChoice; Eligibility; Third Party Liability; Maryland Children's Health Program (MCHP); MCHP premium; Eligibility Verification System; Pre-Authorization; and Early and Preventive Screening, Diagnosis and Treatment.</p>
4.	Project Management	Mr. John Bohns, Division Chief, Division of Management Information Systems.

5.	Project Status	<p><b>Milestone II, Deliverable 1</b> - Project Progress Report Formats, as of Sept. 2002, are below:</p> <p>At the present time the first report is pending.</p> <p>Work accomplished during the reporting period, specifically:</p> <ol style="list-style-type: none"> <li>1. Weekly status report</li> <li>2. Monthly CSR/PIR/AD-HOC request Billable Hour report</li> <li>3. Monthly report of all CSR/PIR/Ad-HOC request assigned with billing hours applied to each.</li> </ol>
6.	Project Estimated Cost	See below.
7.	Major Milestones	<p><b>Milestone I</b> – Orientation / Selection of Staff / Administrative Meeting</p> <p><b>Orientation:</b> Orientation will cover all concerns related to start-up of contract.</p> <p><b>Identification of Personnel:</b> This first step of Orientation will occur within 1 week of contract signature. The Contractor will provide resumes of personnel.</p> <p><b>Administrative Meeting:</b> A meeting will be scheduled at 201 W. Preston Street, Baltimore, Maryland 21201 within 1 month after award of contract. Its primary focus will be on explaining administrative procedures regarding invoices, a format for billing, and a standard for timeliness.</p> <p><b>Deliverable 1</b> – The Software Engineering Contractor shall provide all resumes as requested by OOE. Software Engineering Contractor will work with OOE to schedule interviews and establish start dates as requested by OOE.</p> <p><b>Milestone II - Contract Performance Monthly Billing</b></p> <p>Monthly status and billable hours reports to serve as a basis for contract performance measures.</p> <p><b>Deliverable 1</b> The Software Engineering Contractor will be responsible for supplying OOE with individual weekly status reports of activities, a monthly CSR/PIR/AD-HOC Billing Hours Report, and a listing of all CSR/PIR/AD-HOC assigned, with billing hours applied to each.</p>

8. Managing For Results (MFR) **FY 2005 MFR Strategies – Goals of Medicaid Medical Care Programs Administration (MCP):**

**Goal 3. Maximize the Effectiveness of Operations of Medical Care Programs (MCP).**

**Objective 3.2** DHMH will pay, at least, 90% of all clean fee-for-service claims by 30 days of receipt.

**Objective 3.4** DHMH will pay the MCO's, at least, 90% of all clean claims by 30 days.

9. List of Other Projects Impacted by this Project
- Internal Agency Projects – The Medicaid HIPAA Project, a Major IT Systems Development Project, now under development.
  - Other MD Agency Projects – List Agency/title of project. None.
  - Other Federal, County, Municipal or Private Projects – None.
10. List of System Interfaces

6. (Detail)

Development/Enhancement	Prior to FY2003	FY 2003 Actual	FY 2004 Approp.	FY 2005 Bud Req	FY2006 Projected	FY2007 Projected	FY 2008 Projected	FY2009 Projected	Total
<b>Services</b>									
General Funds									
Special Funds									
Federal Funds									
<b>Sub Total</b>									
<b>Development/Enhancement</b>									
<b>Infrastructure</b>									
General Funds									
Special Funds									
Federal Funds									
<b>Sub Total</b>									
<b>Dev/Enh Total</b>									
<b>Operations/Maintenance</b>									
General Funds		\$395,628	\$476,798	\$526,630					
Special Funds									
Federal Funds		\$1,126,017	\$1,357,040	\$1,498,870					
<b>O&amp;M Total</b>		\$1,521,645	\$1,833,838	\$2,025,500					
<b>Grand Total</b>		<b>\$1,521,645</b>	<b>\$1,833,838</b>	<b>\$2,025,500</b>					

## 7) BOARDS & COMMISSIONS

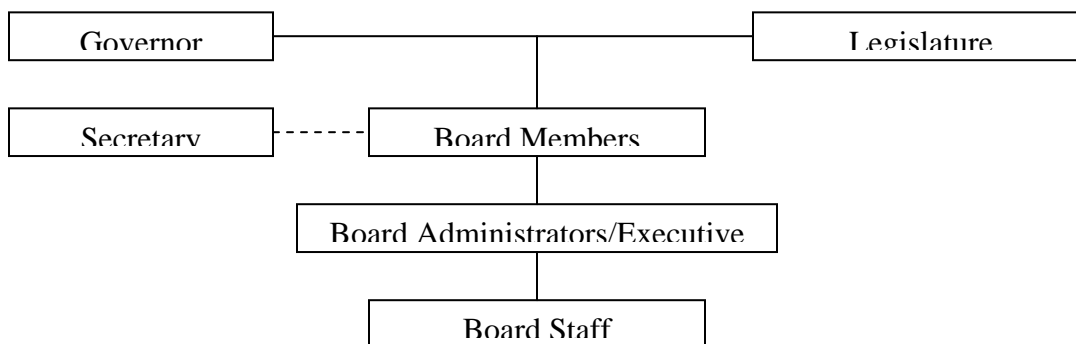
**1. Agency:** Health Occupation Boards & Commission

**2. Budget Appropriation Code:** M00A0104

**3. Mission Statement:** The common overall mission of the Health Occupations Boards is to protect the citizens of Maryland and promote quality care among the various health professions. The Boards accomplish this responsibility through the licensing, regulation and monitoring of health care professionals as mandated under the Health Occupations Article of the Annotated Code of Maryland.

**4. Summary of Business Function:** The Health Occupation Boards & Commission are responsible for licensing various health occupation professions, renewing licensing, receiving and investigating complaints, issuing sanctions and follow up on orders.

**5. Organizational Chart:**



**6. Information Technology Resources:**

A. Organizational Chart of Information Technology (IT) Staff

B. IT Staff by name, title, classification and function (please note if less than full time)

Name	Title	Classification	Function
Henry Harle	Network Specialist	Computer Net Spec II	Provides support for 12 Boards and 1 Commission

Board of Acupuncture

Board of Audiology/Hearing Aid Dispensers, Speech-Language Pathologists

Board of Chiropractic Examiners

Board of Dietetic Practice

Board of Morticians

Board of Nursing Home Administrators

Board of Optometry

Board of Physical Therapy Examiners

Board of Podiatry  
Board of Professional Counselors and Therapists  
Board of Psychology  
Board of Social Workers  
Commission on Kidney Disease

C. Principle hardware and software applications: Pentium class PCs, MS Office, Rumba Mainframe terminal emulator

**7. On-line services:** Several Boards currently have informational web pages. These Boards include:

Board of Acupuncture  
Board of Audiology/Hearing Aid Dispensers, Speech Language Pathologist  
Board of Chiropractic Examiners  
Board of Dietetic Practice  
Board of Morticians  
Board of Nursing Home Administrators  
Board of Optometry  
Board of Physical Therapy  
Board of Professional Counselors and Therapist  
Board of Social Work Examiners

No customer interactivity is currently available on the web sites. However, there are plans in the future to implement online license renewal and verification of licensure.

**8. Project Management:** This section is to be completed for each individual; project, including software, infrastructure and enhancement projects.

A. Project Title: Web Sites for the Boards

B. Project description: In an effort to become more web aware and increase web exposure for the Boards and Commission, an effort is underway to create and maintain web sites for all of the smaller licensing Boards. For most Boards (approx. 77%), this has already been completed and for some web sites are being prepared.

C. Project Team: Henry Harle, Board Administrators/Executive Directors and the Department's IRMA staff

D. Implementation strategy: The time frame for development is to have all the smaller Boards' websites created by the end of fiscal year 2004, after which time the Boards web sites will be updated and improved indefinitely.

E. Description of Requirements for Funding: No additional hardware will be required initially since the web sites will be physically housed on the State's web server. However, as the Boards' web sites expand and improve, additional hardware,

software, and staff may be required to maintain and improve web development.

- F. Project status: Currently 77 percent of the smaller Boards have web sites for informational purposes only.
- G. Other Projects Impacted: None
- H. Risk Management: Web security will be a considerable risk to privacy of data. It is always possible to hack into the existing web server, alter information, and Repost inaccurate data.
- I. Linkage to Maryland's ITMP: All Boards plan to have web sites by July 2004.
- J Linkage to Managing for Results:
  - 1. Goals / Objectives: All the Boards plan to have web sites by July 2004.
  - 2. Performance Measures / Indicators: 70 percent of all information and services available by July 2004.
  - 3. Strategies: After completing research on the costs and development of a web site that can provide information and service to the public, implement the web site by December 1, 2004.

#### Electronic License Renewal

- A: Project Title: Electronic License Renewal
- B. Project Description: In accordance with Maryland Electronic Government Initiative, the licensing Boards shown in number 6 of this document, will provide web enabled electronic processes, including, but not limited to, electronic licensing renewal.
- C. Project Team: Henry Harle, Board Administrators / Executive Directors
- D. Implementation Strategy: Determine appropriate software, if any. Purchase and install software. Convert any existing databases to the new application or import data into the new application. Process should be complete by year 2005.
- E. Description of Requirements for funding: Additional staff will be required to maintain electronic licensing database and web functions.
- F. Project Status: The Boards are presently working with IRMA staff to convert existing databases from the mainframe to a Boards maintained and operated local server. This is seen as Phase One in the plan to provide electronic licensing renewals.
- G. Other Projects Impacted: None
- H. Risk Management: Web security will be a considerable risk to privacy of data. It is always possible to hack into the existing web server, or web database and alter

the information.

Authenticity will also be a factor. The Boards have to, in some way, verify that the Individual filling out the electronic license renewal form, is really the person authorized to complete this transaction.

Funding may also be a considerable hindrance to implementing this web technology. The Boards are all special funded entities which generate their own income at the expense of their licensees.

- I. Linkage to Maryland's ITMP: All Boards plan to have Electronic License Renewal sites by (date to be announced).
- J. Linkage to Managing for Results:
  - 1. Goals / Objectives: Have all Boards databases converted by Jan. 2005
  - 2. Performance Measures / indicators: not available at this time
  - 3. Strategies: Convert all Boards databases and proceed with future phases of the electronic licensing system.

## **B. IT PERSONNEL**

As of August 1, 2003 the Department of Health and Mental Hygiene had 253.5 positions in information technology classifications at headquarters units and facilities. Of this total, 14 data entry positions will be eliminated by September 30, 2003. An additional three data entry positions will be eliminated over the next four to six months. There were an additional 36 IT positions at local health departments on August 1, 2003.

An up-to-date listing of DHMH positions in information technology classifications may be obtained from Mr. Charles Herr, Personnel Services Administration, DHMH. Mr. Herr can be contacted at 410-767-5661 or [HERRC@dhmh.state.md.us](mailto:HERRC@dhmh.state.md.us).

## **C. IT INFRASTRUCTURE**

### **Transport**

The Department moves information via telecommunication lines, including Local Area Network (LAN), Wide Area Network (WAN), video conferencing, audio conferencing and satellite downlink.

The DHMH telecommunications infrastructure is comprised of **Local Area Networks (LAN)** at each of the facilities and a Wide Area Network (WAN) that provides data access the DHMH Headquarters. The LANs are used primarily to support daily administrative functions and to provide user access to DHMH applications. The DHMH LAN includes routers, switches, servers, mid-range computers, firewalls and gateways to provide access to the Annapolis Data Center mainframe. The DHMH Headquarters LAN is the hub for most users and facilities. DHMH is currently in the process of redesigning the Headquarters LAN to better support all users and make a more robust network supporting Internet and web enabled access. The redesign includes full site redundancy and better firewall protection.

### **Wide Area Network (WAN)**

The WAN provides access to financial data, health related applications, the Internet, Intranet and email via DHMH Headquarters. DHMH is in the process of moving from a Mainframe based Environment to a Client-Server Environment, using the Oracle Database and Microsoft SQL and the Microsoft Office Professional Suite as standards. The Administration has implemented a private Statewide frame-relay Wide Area Network. The WAN, with a T3 frame-relay at its core, connects the county Health Departments, State Hospital Centers, DDA Regional Offices, as well as the remote headquarters buildings to the O'Connor building, ADC, DHR, and the Internet. The WAN is protected from the Internet by two Gauntlet firewalls. The WAN was constructed based on the Statewide Policies described in the State of Maryland Information Technology Master Plan.

### **Audioconferencing/Videoconferencing/Satellite**

The DHMH distance learning systems are used in a variety of situations including training, communication and virtual meetings in multiple locations. It can also be utilized to coordinate responses, promote informed decision making and support the allocation of critical resources in the event of a public health emergency.



Public Health Distance Learning at DHMH is primarily focused in four priority areas of creating Dynamic and interactive opportunities for both improved communication and learning.

Audio Conferencing is actively used for numerous administrative and work situations that have allowed many Public Health professionals the opportunity to avoid traveling to the central office in order to attend regularly scheduled meetings. The department has purchased and installed an audio bridge that can accommodate up to 48 callers on multiple calls at one time. The DHMH conference bridge will allow department personnel to hold conference calls with costs substantially lower than if commercial providers are used.

Large Conference Room Video Conferencing capabilities (operating on three ISDN lines) are rapidly expanding throughout the network of the 24 Local Health Departments. This real time audio and video interactive communication and learning tool is being used to connect regularly scheduled meetings of the Health Information Coordinating Council, HICC Workgroups, the Deputy Secretary for Public Health's Roundtable monthly meetings as well as for other regularly scheduled planning meetings such as Bio-Terrorism Preparedness. DHMH will continue to explore ways to provide video conferencing and video bridging services for the benefit of distant counties.

Live satellite broadcasting is also available at the DHMH site. This service provides Public Health employees with an excellent opportunity to view national live satellite broadcasts that are downlinked directly into the DHMH headquarters facility for either viewing or recording. The last and most rapidly developing area in Distance Learning opportunity is related to the learning capabilities on the Internet. The rate of change and innovation in this area is measured in months (not years – as in most other areas of change.) The trend to wireless connectivity has truly fueled a new way of working, communicating and learning that wasn't even on the horizon eight years ago. The impact of Public Health Distance Learning innovation is being felt throughout every level of this organization. As DHMH places increased value on becoming a Learning Organization, the value and importance of Public Health Distance Learning will be realized in every DHMH facility in the State.

### **Enhanced Services**

DHMH provides value added services to make information resources useful to and usable by its customers:

### **Help Desk**

The Technical Support Help Desk was established in order to provide DHMH computer users with one number to contact for technical support. The support areas provided includes, but is not limited to:

- Hardware and software installation, troubleshooting, & repair
- LAN/WAN administration, installation, & troubleshooting
- Mainframe and Midrange support

The Help Desk utilizes MAGIC TSD software by Network Associates, Inc. (NAI). This web-based software allows technical support staff to track service requests, generate work orders, perform remote control of the user's desktop for troubleshooting/repair, and, put in place reporting features for use by management. In the future, users will be able to Log a call with the

Help Desk via Groupwise and also log a call and check status via the Web. The ultimate goal is to bring other administrations onboard as users of this system.

### **Information Security Protection for eGovernment Services**

DHMH has a set of comprehensive information protection policies and procedures in place, and requires all personnel to abide by these directives. As part of those requirements to meet our Departmental Goal and the operational needs for the confidentiality, integrity, and availability of information resources we have classified information into three distinct types, and have directed that reasonably commensurate levels of protection be provided for these valuable resources. This protection is based on respective risks and consequences of disclosure.

- (1) **Public Information** - Information in the public domain with no federal, state, or proprietary restrictions on its use or disclosure;
- (2) **Proprietary Information** - Information having competitive or intrinsic value in ownership, that is protected under federal or state laws or regulations or by contractual obligations, or information, although designated as public, that may be restricted by method of access or level of detail and not provided unless requested for legitimate business reasons;
- (3) **Protected Information** - as defined in federal laws and regulations (e.g. HIPAA), and in Maryland law and regulation- Includes personally identifiable/linkable information that requires the highest level of protection.

The Department currently provides information security protection as described below for these classes of information based upon type and reasonably commensurate with the risk of disclosure.

**Protection of Public Information:** Public information is protected to assure the integrity of the information by keeping this information from accidental or intentional manipulation or change. We also assure the availability of the information by keeping it reasonably safe from denials of service attacks or other attempts to deny access to the information when needed. Public information maintained outside Department firewalls is protected by (1) acceptable firewall technology equal to or better than the Department or state standard, (2) continuous software upgrades to server operating and application software, (3) the limitation of unnecessary internet services on the servers, (4) adequate, restorable backups, onsite and off-site, (5) physical and environmental security for server location and backup sites, (6) and strict adherence to Department and state mandated security procedures.

**Protection of Proprietary Information:** Proprietary information has the same integrity and availability protection as public information, with additional care to assure confidentiality. In addition to the preceding protective standards for Public information, proprietary information is further protected by identifying and permitting appropriate users to access information limited by access control passwords and user identity.

**Protection of Protected Information:** Protected information requires the highest level of protection to assure continued confidentiality, integrity, and availability of the resources. Such protection includes all of the above approaches and additionally requires: (1) two-part or strong identification using a password and a token or smart card, (2) a digital certificate on a smart card or other removable media, or on the hard drive, (3) the use of a digital

signature process using the preceding resources, (4) the use of Lightweight Directory Access Protocol (x.509) for management of these resources, (5) encrypted transmission using Secure Socket Layers technology and/or the use of a Virtual Private Network, and (6) the installation of administrative procedures that support these resources.

## Data Systems

DHMH operates several hundred data systems in programs throughout the Department. An inventory is attached at Appendix 1.

## SECTION FIVE: DHMH INFORMATION TECHNOLOGY POLICIES

Policy No.	Title
02.01.01	Policy on the Use of DHMH Electronic Information Systems (EIS)
02.01.02	Policy on the Use and Copying of Software and the Prevention of Computer Software Copyright Infringement
02.01.03	Policy on the Acquisition and Utilization of Information Technology Resources
02.01.04	<i>System Life Cycle Management</i> *
02.01.05	HICC Policy
02.01.06	Information Assurance Policy (IAP)

\* The *DHMH Systems Development Life Cycle (SDLC) Policy* has been superseded by the DBM SDLC Policy.

All other DHMH Information Technology Policies may be viewed at:

[DHMH Policies](#)

<http://www.dhmh.state.md.us/policies/op02.htm>

## **APPENDICES**

1. DHMH Data Systems Inventory
2. DHMH Software Standards
3. DHMH Hardware Standards
4. DHMH IT Positions (hard copy)
5. DHMH Telecommunications Plan (hard copy)
6. DHMH Computer Equipment Inventory (hard copy)